DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [66 FR 13422 3/6/2001]

[Docket No. 2001-SW-01-AD; Amendment 39-12134; AD 2001-03-51]

RIN 2120-AA64

Airworthiness Directives; Sikorsky Aircraft Corporation Model S-76B and S-76C Helicopters

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; request for comments.

SUMMARY: This document publishes in the **Federal Register** an amendment adopting Airworthiness Directive (AD) 2001-03-51, which was sent previously to all known U.S. owners and operators of Sikorsky Aircraft Corporation (Sikorsky) Model S-76B and S-76C helicopters by individual letters. This AD requires, for certain main rotor shafts, initial and recurring fluorescent penetrant inspections. Replacing each affected main rotor shaft (shaft) on or before reaching 1,000 hours time-in-service (TIS) is also required. This amendment is prompted by four reports of shaft cracks. The actions specified by this AD are intended to prevent failure of the shaft and subsequent loss of control of the helicopter.

DATES: Effective March 21, 2001, to all persons except those persons to whom it was made immediately effective by Emergency AD 2001-03-51, issued on January 30, 2001, which contained the requirements of this amendment.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of March 21, 2001.

Comments for inclusion in the Rules Docket must be received on or before May 7, 2001.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Office of the Regional Counsel, Southwest Region, Attention: Rules Docket No. 2001-SW-01-AD, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137. You may also send comments electronically to the Rules Docket at the following address: 9-asw-adcomments@faa.gov.

The applicable service information may be obtained from Sikorsky Aircraft Corporation, Attn: Manager, Commercial Tech Support, 6900 Main Street, Stratford, Connecticut 06614, phone (203) 386-3001, fax (203) 386-5983. This information may be examined at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Wayne Gaulzetti, Aviation Safety Engineer, Boston Aircraft Certification Office, 12 New England Executive Park, Burlington, MA 01803, telephone (781) 238-7156, fax (781) 238-7199.

SUPPLEMENTARY INFORMATION: On January 30, 2001, the FAA issued Emergency AD 2001-03-51 for Sikorsky Model S-76B and S-76C helicopters, which requires, for certain shafts, initial and recurring fluorescent penetrant inspections. Replacing each affected shaft on or before reaching 1,000 hours TIS is also required. That action was prompted by four reports of shaft cracks. This condition, if not corrected, could result in failure of the shaft and subsequent loss of control of the helicopter.

The FAA has reviewed Sikorsky Alert Service Bulletin (ASB) No. 76-66-32A, Revision A, dated January 17, 2001, which specifies identifying main gear box assemblies containing certain shafts, conducting a recurring fluorescent penetrant inspection (FPI), and removing certain main gear box assemblies containing certain shafts.

Since the unsafe condition described is likely to exist or develop on other Sikorsky Model S-76B and S-76C helicopters of the same type designs, the FAA issued Emergency AD 2001-03-51 to prevent failure of the shaft and subsequent loss of control of the helicopter. The AD requires, for certain main rotor shafts, an FPI before further flight and thereafter at intervals not to exceed 20 hours TIS or 80 landings, whichever occurs first. Replacing each affected shaft on or before reaching 1,000 hours TIS is also required. The actions must be accomplished in accordance with the ASB described previously. The short compliance time involved is required because the previously described critical unsafe condition can adversely affect the structural integrity of the helicopter. Therefore, FPI's and removal of each affected shaft are required at the specified time intervals, and this AD must be issued immediately.

Since it was found that immediate corrective action was required, notice and opportunity for prior public comment thereon were impracticable and contrary to the public interest, and good cause existed to make the AD effective immediately by individual letters issued on January 30, 2001, to all known U.S. owners and operators of Sikorsky Model S-76B and S-76C helicopters. These conditions still exist, and the AD is hereby published in the **Federal Register** as an amendment to 14 CFR 39.13 to make it effective to all persons.

The FAA estimates that 7 helicopters of U.S. registry will be affected by this AD. It will take approximately 4 work hours per helicopter to accomplish each FPI and 5 work hours to replace each shaft. The average labor rate is \$60 per work hour. Required parts will cost approximately \$25,000 per shaft. Based on these figures, the total cost impact of the AD on U.S. operators is estimated to be \$178,780 (assuming 1 FPI per helicopter and 1 shaft replacement on each helicopter). Additional FPI's would cost \$240 per inspection and additional shaft replacements would cost \$25,300 per helicopter.

Comments Invited

Although this action is in the form of a final rule that involves requirements affecting flight safety and, thus, was not preceded by notice and an opportunity for public comment, comments are invited on this rule. Interested persons are invited to comment on this rule by submitting such written data, views, or arguments as they may desire. Communications should identify the Rules Docket number and be submitted in triplicate to the address specified under the caption "ADDRESSES." All communications received on or before the closing date for comments will be considered, and this rule may be amended in light of the comments received. Factual information that supports the commenter's ideas and suggestions is extremely helpful in evaluating the effectiveness of the AD action and determining whether additional rulemaking action would be needed.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify the rule. All comments submitted will be available in the Rules Docket for examination by interested persons. A report that summarizes each FAA-public contact concerned with the substance of this AD will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their mailed comments submitted in response to this rule must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket No. 2001-SW-01-AD." The postcard will be date stamped and returned to the commenter.

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

The FAA has determined that this regulation is an emergency regulation that must be issued immediately to correct an unsafe condition in aircraft, and that it is not a "significant regulatory action" under Executive Order 12866. It has been determined further that this action involves an emergency regulation under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979). If it is determined that this emergency regulation otherwise would be significant under DOT Regulatory Policies and Procedures, a final regulatory evaluation will be prepared and placed in the Rules Docket. A copy of it, if filed, may be obtained from the Rules Docket at the location provided under the caption "ADDRESSES."

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding a new airworthiness directive to read as follows:

AIRWORTHINESS DIRECTIVE

Aircraft Certification Service Washington, DC



We post ADs on the internet at "av-info.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2001-03-51 SIKORSKY AIRCRAFT CORPORATION: Amendment 39-12134. Docket No. 2001-SW-01-AD.

Applicability: Model S-76B and S-76C helicopters, with main rotor shaft assembly (shaft), part number (P/N) 76351-09630 all dash numbers, serial number (S/N) C213-00274, C213-00275, C213-00276, C213-00277, C213-00278, C213-00279, C213-00280, C213-00282, C213-00292, C213-00294, C213-00295, C213-00296, C213-00297, C213-00299, and C213-00300, installed, certificated in any category.

Note 1: This AD applies to each helicopter identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For helicopters that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent failure of the shaft and subsequent loss of control of the helicopter, accomplish the following:

- (a) Before further flight and thereafter at intervals not to exceed 20 hours time-in-service (TIS) or 80 landings, whichever occurs first, conduct a fluorescent penetrant inspection (FPI) in the area above the upper shaft output seal and below the lower hub attachment flange in accordance with the Accomplishment Instructions, paragraphs 3.B.(1) through 3.B.(5), of Sikorsky Aircraft Corporation (Sikorsky) Alert Service Bulletin (ASB) No. 76-66-32A, Revision A, dated January 17, 2001. Contacting Sikorsky is not required by this AD. If a crack is found, replace the shaft with an airworthy shaft before further flight.
- Note 2: Accomplishing the FPI before further flight is not required if previously accomplished in accordance with the Accomplishment Instructions, paragraphs 3.C.(1) through 3.C.(5), of Sikorsky ASB No. 76-66-31B, Revision B, dated November 7, 2000.
 - (b) On or before 1000 hours TIS, replace each affected shaft with an airworthy shaft.
- (c) This AD revises the Limitations section of the maintenance manual by establishing a retirement life of 1000 hours TIS for the affected shafts.

- (d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Boston Aircraft Certification Office, FAA. Operators shall submit their requests through an FAA Principal Maintenance Inspector, who may concur or comment and then send it to the Manager, Boston Aircraft Certification Office.
- Note 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Boston Aircraft Certification Office.
- (e) Special flight permits may be issued in accordance with 14 CFR 21.197 and 21.199 to operate the helicopter to a location where the requirements of this AD can be accomplished if the FPI or a visual inspection, using a 10X or higher magnifying glass, does not reveal a crack.
- (f) The FPI shall be done in accordance with the Accomplishment Instructions, paragraphs 3.B.(1) through 3.B.(5), of Sikorsky Aircraft Corporation Alert Service Bulletin No. 76-66-32A, Revision A, dated January 17, 2001. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Sikorsky Aircraft Corporation, Attn: Manager, Commercial Tech Support, 6900 Main Street, Stratford, Connecticut 06614, phone (203) 386-3001, fax (203) 386-5983. Copies may be inspected at the FAA, FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.
- (g) This amendment becomes effective on March 21, 2001, to all persons except those persons to whom it was made immediately effective by Emergency AD 2001-03-51, issued January 30, 2001, which contained the requirements of this amendment.

FOR FURTHER INFORMATION CONTACT: Wayne Gaulzetti, Aviation Safety Engineer, Boston Aircraft Certification Office, 12 New England Executive Park, Burlington, MA 01803, telephone (781) 238-7156, fax (781) 238-7199.

Issued in Fort Worth, Texas, on February 20, 2001. Eric Bries, Acting Manager, Rotorcraft Directorate, Aircraft Certification Service.